Release notes for ENDF/B Development e-092_U_000 evaluation

October 13, 2016

- `fudge-4.0` Warnings:

  1. Mislabled emitted particle
     Reading ENDF file: ../e-092_U_000.endf (Error # 0): ZAP messed up

     `WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0`

  2. FIXME: Generic fudge unimplemented message
     reaction label 1: e- + U + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

     `WARNING: Checking not yet implemented for energyLoss type data`

  3. FIXME: Generic fudge unimplemented message
     reaction label 2: e- + U [excitation] / Product: e- (Error # 0): Generic unimp (c)

     `WARNING: Checking not yet implemented for energyLoss type data`

- `fudge-4.0` Errors:

  1. Calculated and tabulated thresholds don't agree
     reaction label 0: e- + U [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

  2. Calculated and tabulated thresholds don't agree
     reaction label 1: e- + U + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

  3. Calculated and tabulated thresholds don't agree
     reaction label 2: e- + U [excitation] / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

  4. Calculated and tabulated thresholds don't agree
     reaction label 3: e- + e- + U1s1/2 / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 116110. eV!`

  5. Calculated and tabulated thresholds don't agree
     reaction label 4: e- + e- + U2s1/2 / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 21768. eV!`

  6. Calculated and tabulated thresholds don't agree
     reaction label 5: e- + e- + U2p1/2 / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 21044. eV!`

  7. Calculated and tabulated thresholds don't agree
     reaction label 6: e- + e- + U2p3/2 / Cross section: (Error # 0): Threshold mismatch

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WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 17182. eV!
```

8. Calculated and tabulated thresholds don't agree
   reaction label 7: e- + e- + U3s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5521.3 eV!
```

9. Calculated and tabulated thresholds don't agree
   reaction label 8: e- + e- + U3p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5181.5 eV!
```

10. Calculated and tabulated thresholds don't agree
    reaction label 9: e- + e- + U3p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4289.6 eV!
```

11. Calculated and tabulated thresholds don't agree
    reaction label 10: e- + e- + U3d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3736.8 eV!
```

12. Calculated and tabulated thresholds don't agree
    reaction label 11: e- + e- + U3d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3555.2 eV!
```

13. Calculated and tabulated thresholds don't agree
    reaction label 12: e- + e- + U4s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1419.9 eV!
```

14. Calculated and tabulated thresholds don't agree
    reaction label 13: e- + e- + U4p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1264.2 eV!
```

15. Calculated and tabulated thresholds don't agree
    reaction label 14: e- + e- + U4p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1030.5 eV!
```

16. Calculated and tabulated thresholds don't agree
    reaction label 15: e- + e- + U4d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 778.1799999999999 eV!
```

17. Calculated and tabulated thresholds don't agree
    reaction label 16: e- + e- + U4d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 735.14 eV!
```

18. Calculated and tabulated thresholds don't agree
    reaction label 17: e- + e- + U4f5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 402.09 eV!
```

19. Calculated and tabulated thresholds don't agree
    reaction label 18: e- + e- + U4f7/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 390.75 eV!`

20. Calculated and tabulated thresholds don't agree
    reaction label 19: e- + e- + U5s1/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 320.65 eV!`

21. Calculated and tabulated thresholds don't agree
    reaction label 20: e- + e- + U5p1/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 259.38 eV!`

22. Calculated and tabulated thresholds don't agree
    reaction label 21: e- + e- + U5p3/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 203.39 eV!`

23. Calculated and tabulated thresholds don't agree
    reaction label 22: e- + e- + U5d3/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 112.35 eV!`

24. Calculated and tabulated thresholds don't agree
    reaction label 23: e- + e- + U5d5/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 104.02 eV!`

25. Calculated and tabulated thresholds don't agree
    reaction label 24: e- + e- + U5f5/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 8.91 eV!`

26. Calculated and tabulated thresholds don't agree
    reaction label 25: e- + e- + U5f7/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 7.95 eV!`

27. Calculated and tabulated thresholds don't agree
    reaction label 26: e- + e- + U6s1/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 52.23 eV!`

28. Calculated and tabulated thresholds don't agree
    reaction label 27: e- + e- + U6p1/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 34.09 eV!`

29. Calculated and tabulated thresholds don't agree
    reaction label 28: e- + e- + U6p3/2 / Cross section: (Error # 0): Threshold mismatch

    `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 24.57 eV!`

30. Calculated and tabulated thresholds don't agree
reaction label 29: e- + e- + U6d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4.74 eV!
```

31. Calculated and tabulated thresholds don't agree
reaction label 30: e- + e- + U6d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4.13 eV!
```

32. Calculated and tabulated thresholds don't agree
reaction label 31: e- + e- + U7s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5.78 eV!
```

- `xsectplotter`   Warnings:

    1. Mislabled emitted particle
       Error: ZAP messed up

```
stderr while processing crossSection

        WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
... [4 more lines]
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